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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/873,418	06/05/2001	Herbert Benson Scher	RIA 57700	5799

26748 7590 08/13/2003

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PATENT AND TRADEMARK DEPARTMENT
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EXAMINER

FUBARA, BLESSING M

ART UNIT	PAPER NUMBER
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1615

DATE MAILED: 08/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/873,418

Applicant(s)

SCHER ET AL.

Examiner

Blessing M. Fubara

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 16-26 is/are rejected.
- 7) ☒ Claim(s) 8-15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 15.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Examiner acknowledges receipt of amendment A and IDS filed 05/29/03.

Claim Rejections - 35 USC § 112

1. The rejection of claims 1-26 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention is withdrawn in light of the amendments to claims 7 and the explanation of issues raised on claim 1. In response to applicants' question regarding the rejection of claim 14 and 15 under 35 U.S.C. 112, second paragraph, it is noted that claim 14 depended on claim 7 and claim 15 depended on claim 14 and thus depended from claim 7, hence the rejection.

Claim Objections

2. The objection of claims 5-14, 21, 25 and 26 under 37 CFR 1.75(c) as being in improper form is withdrawn because the amendment to said claims overcomes the issues raised.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4 and 16-26 are rejected under 35 U.S.C. 102(a) as being anticipated by Van Koppenhagen (WO 00/05951).

Van Koppenhagen discloses microencapsulated compositions containing active agents that are encapsulated within a polymeric wall such as an aminoplast shell wall, the shell wall

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contains an ester containing cross-linking unit (page 1, paragraph 1) and amino resin pre-polymer that is reacted with molecules such as pentaerythritol, dipentaerythritol, tripentaerythritol, trimethylolpropane, glycerol, mercaptoethanol and 2-(hydroxy or thiol) substituted C₂-C₆ alkanolic acid (page 3, 3rd full paragraph to page 4, paragraph 2). Derivatives of pentaerythritol such as glycolate or diglycolate are used in Van Koppenhagen (pages 10-13). Glycolate or diglycolate meets the limitation of carboxylate in claim 4. Van Koppenhagen in example 1 prepares the cross-linkers and in examples 2-17 prepares the microcapsules. Van Koppenhagen prepares the microcapsules by encapsulating pesticide within the aminoplast polymeric wall formed by interfacial polymerization and condensation of a mixture of butylated urea-formaldehyde pre-polymer and cross-linking agent that contains sulfhydryl and/or hydroxyl groups (example 2). The teachings of Van Koppenhagen meet the limitations of the claims.

5. Claims 1-7 and 16-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Scher et al. (US 5,160,529).

Scher discloses microcapsules that contain within the core of the microcapsule an anilide herbicide and optionally herbicide antidote and the core, which comprises herbicides or insecticides or defoliants or insect repellants or fungicides, is enclosed within a porous shell (abstract, column 3, line 11 to column 7 line 45). The porous shell is made of partially etherified amino resin, which is prepared by known techniques (column 8, lines 41-65), commercially available pre-polymer can also be suitable in Scher (column 8, lines 36-40). The porous shell may also include optional additives (column 9, line 25 to column 10, line 11). The microcapsule in Scher is prepared by providing organic solution of the partially etherified amino resin pre-polymer in the herbicide or insecticide or fungicide liquid, creating an emulsion of said

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solution in continuous phase of aqueous solution that contains water and surface-active agent, and causing in situ self-condensation and curing of the amino resin pre-polymer in the organic phase and by adding acidifying agents to the emulsion in order to maintain the pH of the emulsion between at about 0 to about 4 for a sufficient period to allow the in situ self condensation of the pre-polymer to convert the liquid droplets of the organic solution to capsules (abstract and column 2, lines 35-62). The teachings of Scher meet the limitations of the claims.

6. Claims 8-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The cited prior art does not teach surface modifying agent having structure (IVA) in instant claim 8.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blessing M. Fubara whose telephone number is 703-308-8374. The examiner can normally be reached on 7 a.m. to 3:30 p.m. (Monday to Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page can be reached on 703-308-2927. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3592 for regular communications and 703-305-3592 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1234.

Blessing Fubara 
Patent Examiner
Tech. Center 1600
August 11, 2003